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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/757,255

01/14/2004

Dean Joseph Ippolito

4079

7590

07/31/2006

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BOSTON,, MA 02163

EXAMINER

KAYES, SEAN PHILLIP

ART UNIT

PAPER NUMBER

2841

DATE MAILED: 07/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/757,255	IPPOLITO ET AL.	
	Examiner	Art Unit	
	Sean Kayes	2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,7,8,10-14 and 16-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7,8,10-14 and 16-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-5, 7, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein (US 3698180) in view of Dennison (US 3228688.)

3. With respect to claim 1 Klein discloses a device for displaying information about a game comprising: a body (chess board, P1, picture I. provided below, 10, figure 2); a first display (P2, picture I. and 30 figure 1) operable to display first information about a player of the game; and a second display (P3 picture I. and 32 figure 1) operable to display second information about the player of the game, the second display facing in a different direction from that of the first display, in which both the first display and the second display are attached to the body.

Klein does not disclose wherein the displays are rigidly attached to the body.

Dennison teaches a two sided display and housing mounted overtop of a playing board (67 figure 1.)

At the time of the invention it would have been obvious to one skilled in the art to house Klein's chess clocks in a solid one piece body located over and rigidly attached to the playing board as taught by Dennison.'

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The suggestion or motivation to do so would be to allow the users to easily view the game relevant information as taught by Dennison (column 3 lines 44-51.) There would additionally be a benefit of making the system more durable.

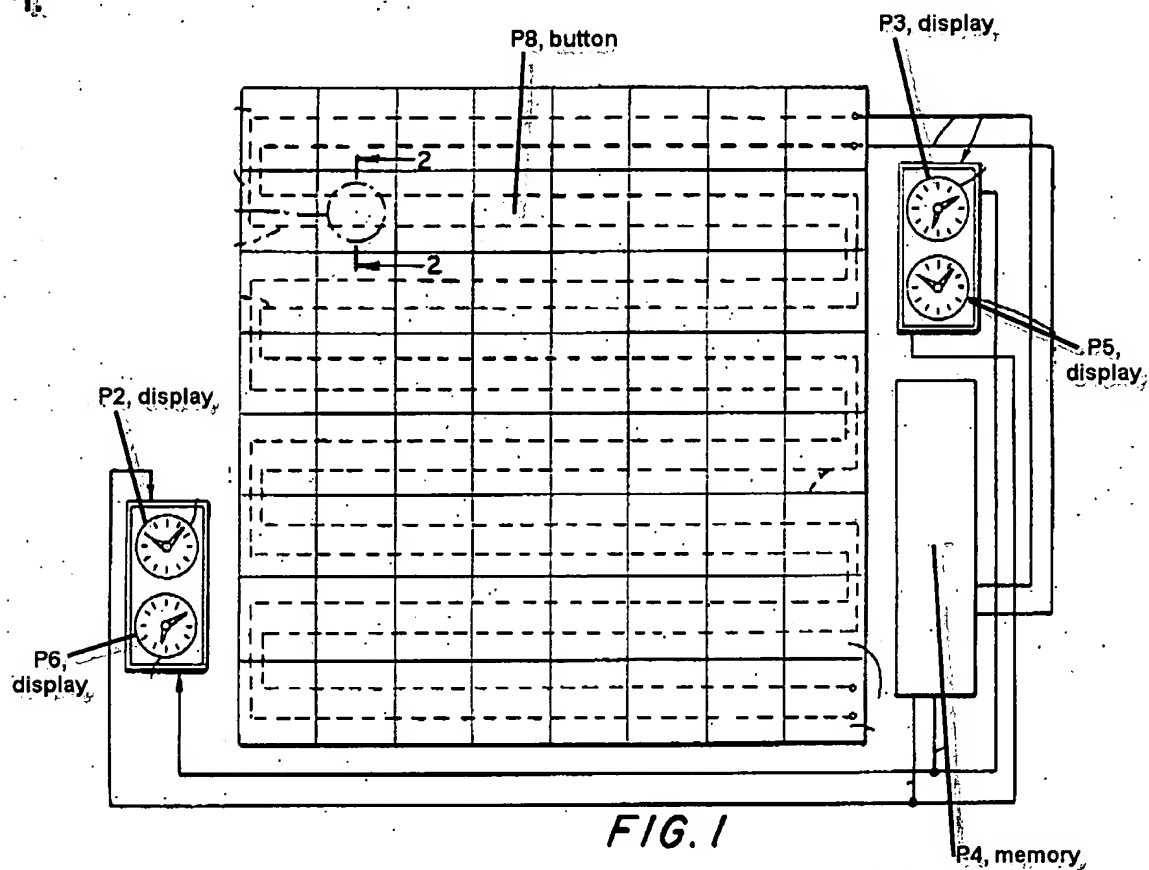


FIG. 1

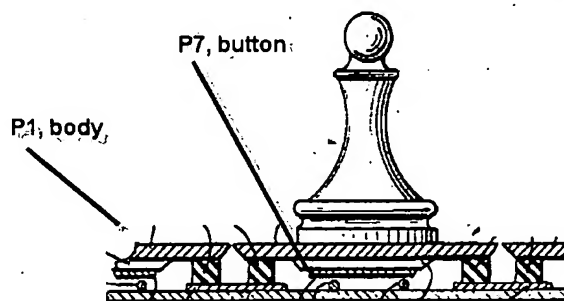


FIG. 2

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4. With respect to claim 3 Klein and Dennison teach a device for keeping time comprising: a single rigid chassis (See modification to Klein in 103 rejection to claim 1); a first memory (P4 picture I.) for storing a first amount of time remaining for a first player of a game, the first memory attached to the chassis (column 2 lines 21-23); a first display (P2 picture I.) for displaying the first amount of time, the first display rigidly attached to the chassis (See modification to Klein in 103 rejection to claim 1) and coupled to the first memory (P4, picture I.); a second display (P5, picture I.) for displaying the first amount of time, the second display rigidly attached to the chassis and coupled to the first memory, in which the second display faces in a different direction from that of the first display (The housing taught by Dennison mounts the two displays facing in opposite directions, figure 1.); a second memory (P4) storing a second amount of time remaining for a second player of the game, the second memory attached to the chassis (P1); a third display (P6, picture I.) for displaying the second amount of time, the third display rigidly attached to the chassis and coupled to the second memory; and a fourth display (P6 picture I.) for displaying the second amount of time, the fourth display attached to the chassis and coupled to the second memory.

5. With respect to claim 4 Klein and Dennison teach the device of claim 3, in which the second display faces in a direction opposite that of the first display (The housing taught by Dennison mounts the two displays facing in opposite directions, figure 1.)

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6. With respect to claim 5 Klein and Dennison teach the device of claim 3, in which the first display and the third display are the same display (P2 and P6 are part of the same larger display), and in which the same display displays the first amount of time at a first location on the display and the second amount of time at a second location on the display.

7. With respect to claim 7 Klein and Dennison teach the device of claim 3, in which the first memory and the second memory are the same memory, and in which this same memory stores the first amount of time in a first location in the memory and the second amount of time in a second location in the memory. (P4 picture I. and 50 figure 1. The memory P4 has an on and an off state.)

8. With respect to claim 11 Klein and Dennison teach the device of claim 3 further including: a signal generator for generating a timing signal (timing signal is the signal that coordinates the displays P2 to P5 and P3 to P6), the signal generator coupled to the first memory and to the second memory (P4 picture I.); a first button (P7 picture I.) for signaling a first play in the game, the first button attached to the chassis and coupled to the first memory and to the second memory; and a second button (P8, although any of the wiring means in any of the spaces of the board could function as the second button, so long as it is different from the first) for signaling a second play in the game, the second button (P8 picture I.) attached to the chassis (P8 Picture I.) and coupled to the first memory and to the second memory (by means of wires, see picture I. or figure

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1), in which: the first memory is operative to reduce the first amount of time remaining upon receipt of signals from the second button; the first memory is operative to stop reducing the first amount of time remaining upon receipt of signals from the first button; the second memory is operative to reduce the second amount of time remaining upon the receipt of signals from the first button; and the second memory is operative to stop reducing the second amount of time remaining upon receipt of signals from the second button (Timing operation is discussed in column 1 lines 41-57. The timing function can be repeated using the two buttons P7 and P8 or any other button located in a space on the board. While it is true that the operation is generally performed by the movement of different pieces, to different positions/buttons, it is not necessary to perform this operation using more than one or two buttons.); the motion of the first button with respect to the chassis is constrained to one dimension; and the motion of the second button with respect to the chassis is constrained to one dimension (The structure of the buttons is shown in figure 2. The buttons, 76 figure 2, are fixedly attached to the board and are only free to move in a vertical direction, namely up and down.)

9. With respect to claim 12 Klein and Dennison teach the device of claim 3, further including a processor (the processor is the system made up of the wiring, the board P1, the memory P4, and the timing control means present in each console 30 and 32 figure 1), the processor attached to the chassis and operative to: direct the first memory to reduce the first amount of time remaining; direct the second memory to reduce the second amount of time remaining; direct the first memory to stop reducing the first

amount of time remaining; direct the second memory to stop reducing the second amount of time remaining; direct the first display to display the first amount of time; and direct the second display to display the first amount of time (the wiring in the board P1 and the buttons P7, send the signals that switch memory P4 to operate the timing mechanisms in consoles 30 and 32 figure 1.)

10. Claims 10 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein (US 3698180) in view of Dennison (US 3228688) in further view of Leuschner (US 4065916.)

11. With respect to claim 10 Klein and Dennison teach the device of claim 3.

Klein does not disclose wherein the first display is at least one of: (a) a liquid crystal display; (b) a dot matrix display; (c) a diode display; (d) a light emitting diode display; (e) an organic light emitting diode display; (f) a cathode ray tube; and (e) a projection display.

Leuschner teaches a liquid crystal display for displaying time.

At the time of the invention it would have been obvious to one skilled in the art to make the time displays in Klein using an LCD display.

The suggestion or motivation would be to reduce the cost of construction and/or to increase the ability of the user to read the display.

12. With respect to claim 14 Klein, Dennison, and Leuschner teach a device comprising: a means for tracking a first time (clock P2, picture 1.); a means for tracking a

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second time (clock P3, picture I.); a first display means (P2) for displaying the first time in a first direction; a second display (P5) means for displaying the first time in a second direction; and an initiation means (combination of buttons P7, board, and memory P4 picture I.) for initiating the reduction of the first time and halting the reduction of the second time, in which the first display means is at least one of a liquid crystal display, a dot matrix display, a diode display, a light emitting diode display, an organic light emitting diode display, a cathode ray tube, a projection display, a mirror, a reflective surface, a convex mirror, a concave mirror, a series of mirrors; and a transparent panel with opaque indicia.

13. Claim 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein (US 3698180) in view of Dennison (US 3228688) in further view of Newbill (US 4541633.)

14. With respect to claim 8 Klein and Dennison teach the device of claim 3.

Klein does not disclose wherein the first memory is a semiconductor memory.

Semiconductor memories are notoriously well known in the art. Similarly the use of computer microprocessors in combination with computer memory and a frequency generator to measure multiple times is very well known. Provided as evidence Newbill teaches a chess clock that controls it's timing operations with a frequency generator, a microprocessor, and multiple memories.

At the time of the invention it would have been obvious to one skilled in the art to combine Newbill's time controlling means with Klein's sensor board and display layout.

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The suggestion or motivation for doing so would be to provide a more modern and controlled timing means with the additional control functions of a microprocessor to Klein's invention. For instance it would be easier to reset all the displays and time means using Newbill's timing apparatus. It should be noted that most likely Newbill is using a semiconductor memory for his memory means. Newbill, however, does not explicitly state that the memory is no a semiconductor. At the time of the invention it would have been obvious to one skilled in the art to use a semiconductor memory as the memory means in applying Newbills timing apparatus to Klein's invention. The suggestion or motivation for doing so would be to provide a reliable and easily available and affordable memory for the storage of memory, namely the timing information.

15. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klein (US 3698180) in view of Dennison (US 3228688) in further view of Rast (US 6904001) and Wikipedia.

16. With respect to claim 13 Klein and Dennison teach the device of claim 3.

Klein does not disclose wherein the device further including a microphone for receiving voice inputs, in which the microphone is electrically coupled to the first memory.

Rast teaches attaching a microphone to a clock/timer for the purpose of recording audible notes (column 25 lines 54-57.) Wikipedia teaches recording notes about a chess game.

At the time of the invention it would have been obvious to one skilled in the art to attach a microphone as taught by Rast. Klein's invention is not sufficient to store an audio recording. Subsequently in attaching a microphone as taught by Rast it would be necessary to include a more substantial memory. This memory could either be independent of the first memory or the first memory could be replaced with a more substantial memory capable of both performing the necessary operations of the timer as well as that for the recording of voice information. In the first instance the microphone would be electronically coupled to the first memory by running off the same power source. In the second case the microphone would be coupled to the memory through the processor.

The suggestion or motivation for doing so would be to allow a player or judge/referee to record notes about the game using the game timer.

17. Claims 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein (US 3698180) in view of Kifer (US 6102399.)

18. With respect to claim 16 Klein discloses a device comprising: a body (P1, picture 1.); a memory (P4) and four buttons (P8), each of which, when pressed, halts the reduction of a first one of the times remaining stored in a first one of the memory locations, and initiates the reduction of a second one of the times remaining stored in a second one of the memory locations, in which the memory and each of the four buttons are attached to the body (column 1 lines 41-57, the two memory locations correspond to the two conditions of the memory, P4 picture 1. The reduction in time is performed in the

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progression of time such that the hands move toward the limit of time. For instance in the situation where each player has an hour to perform their moves the timer reduces the remaining time by moving the indication of minutes hand close to the vertical position, pointing upward.)

Klein does not disclose the memory including four memory locations, in which each of the four memory locations stores a time remaining for a different one of four players.

Kifer teaches a four-player version of chess.

At the time of the invention it would have been obvious to one skilled in the art to modify Klein's invention to time four different players. This could be done by expanding the number of sensitive spaces on the board to match that of the number of spaces in Kifer's board; the number of clocks per display or console could be increased to four; and two more consoles, or displays, could be provided such that each player would have a display that displayed the time of each player. Additionally the memory would have to be increased such that there were at least four memory locations such that at least one memory condition corresponds to a given player.

The suggestion or motivation for doing this would be to modify Klein's invention such that it could be applied to time all the players in the new four person version of chess.

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19. With respect to claim 17 Klein and Kifer teach the device of claim 16, further including four displays, in which each display is operable to display one of the times remaining, and in which each display is attached to the body (by means of wires.)

20. With respect to claim 18 Klein and Kifer teach the device of claim 17, in which a first of the four displays is attached to a first face of the body and a second of the four displays is attached to a second face of the body, in which the first face is different from the second face. (The face of each display would be separate from the other display as it would be on a different console. The body in this sense would be made up not only of the board, but of the consoles as well.)

21. With respect to claim 19 Klein and Kifer teach the device of claim 16, further including: a first display operable to display a first and second of the times remaining; and a second display operable to display a third and fourth of the times remaining, in which the first display and the second display are attached to the body. (The first display is the first console which displays each of the four players' times, including the first and second players' times. The second display is the second console which similarly display all the players' times, including the third and fourth players' times. The consoles/displays are connected to the body by means of wires.)

22. With respect to claim 20 Klein and Kifer teach the device of claim 16, with the four buttons referred to as A, B, C, and D, and with the four memory locations referred

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to as w, x, y, and z, in which: button A when pressed, halts the reduction of the time remaining stored in memory location w, and initiates the reduction of the time remaining stored in memory location x; button B, when pressed, halts the reduction of time remaining stored in memory location x, and initiates the reduction of time remaining stored in memory location w; button C, when pressed halts the reduction of the time remaining stored in memory location y, and initiates the reduction of the time remaining stored in memory location z; and button D, when pressed halts the reduction of the time remaining stored in memory location z, and initiates the reduction of the time remaining stored in memory location y. (Button A is the button first pushed by player 1. Button B is the second button pushed. Button C is the third button pushed. Button D is the fourth button pushed. While which button is pushed in what order will change from game to game. In ever game there is a button A, a button B, a button C, and a button D.)

Response to Arguments

23. Applicant's arguments with respect to claims 1, 3-5, 7-8, 10-12, and 14 have been considered but are moot in view of the new ground(s) of rejection.

24. Applicant's arguments filed 6/27/2006 have been fully considered but they are not persuasive.

25. Applicant's argument with respect to claim 13 states that examiner lacks motivation for combining a microphone as taught by Rast with Klein. The motivation can be found in column 25 lines 54-57 "for the recording of notes. Additional evidence for

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taking notes about a chess game can be found at

wikipedia.org/wiki/portable_game_notation; Dec 04, 2003

26. Applicant argument with respect to claims 16-19 that the examiner has provided no motivation for modifying Klein's invention for four players. The motivation is provided by Klein, column 1 lines 14-17. Klein states that it is desirable to time a game between people in order to "indicate whether any player has failed to make a prescribed number of moves in a pre-set time interval. Furthermore, applicant's discussion of the background art discloses the motivation for timing players movements paragraphs 3 and 4. The motivation to record the times of four players is the same as the motivation to record the times of two players.

27. Applicant additionally argues the combination of Klein and Kifer would raise technical difficulties. Applicant states that the difficulties would include increasing the number of squares from 64 to 196 and providing additional wiring. However, such difficulties would not be beyond the skill of one of ordinary skill in the art.

28. Applicant argues that the combination of Kifer and Klein exacerbates the existing deficiencies of Klein. The existing deficiencies of Klein's invention do not make it incompatible with Kifer.

29. Applicant's argument with respect to claim 20 states that the new claim is in condition for allowance because buttons A and B function independently from buttons C and D. Applicant states "neither button A not button B has any effect on times remaining in memory locations y and z." This is, however, not what the claim limitations recite. The limitations of claim 20 state that "button A when pressed, halts the reduction of the time

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remaining stored in memory location w, and initiates the reduction of the time remaining stored in memory location x; button B, when pressed, halts the reduction of time remaining stored in memory location x, and initiates the reduction of time remaining stored in memory location w; button C, when pressed halts the reduction of the time remaining stored in memory location y, and initiates the reduction of the time remaining stored in memory location z; and button D, when pressed halts the reduction of the time remaining stored in memory location z, and initiates the reduction of the time remaining stored in memory location y." Nowhere is there reference to buttons A or B not affecting the operation of memory locations y or z. Applicant is incorrect is stating that the claim recited said limitations.

Conclusion

30. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean Kayes whose telephone number is (571) 272-8931. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kammie Cuneo can be reached on (571) 272-1957. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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